

### Responsiveness Summary

The California Division of Oil and Gas has submitted an application to the Environmental Protection Agency (EPA) requesting approval of its Underground Injection Control program. The program would regulate all Class II oil and natural gas related injection wells in California.

After appropriate public notice requesting comments on the application, oral comments were received at public hearings at Bakersfield, CA on June 1, 1982 and at San Francisco, CA on June 3, 1982. Written comments were also permitted before the closing date of June 10, 1982.

This is the summary of responses to the comments received during the public comment period.

1. Comment: An aquifer exemption should be limited. Only that portion of an aquifer affected by the oil and gas project should be exempted and an exemption should only allow the injection of certain types of fluids.

Response: In the Class II program being approved by EPA, an aquifer exemption is limited. Only that portion of an aquifer underlying the oil and gas project area has been exempted and the exemption is only for the injection of fluids related to Class II activities as defined in 40 CFR 146.05(b). In addition an aquifer exemption is not necessarily permanent. The approved program permits reviews of all aquifer exemptions. For good reason and by mutual agreement, the Division of Oil and Gas and EPA can withdraw the exemption status of an aquifer.

2. Comment: Concern was expressed about certain aquifers currently being injected into and proposed for exemption. The primary concern was that these aquifers may be of adequate quality and at shallow enough depths that potential beneficial uses such as agricultural, industrial, or drinking water uses may be adversely affected by the existing injection practices.

Response: The purpose of the underground injection control program is to prevent injections which endanger underground sources of drinking water (USDW). The definition of a USDW (40 CFR 146.03) is "an aquifer or its portion:

- (1) (i) which supplies any public water system; or  
(ii) which contains a sufficient quantity of groundwater to supply a public water system; and  
(A) currently supplies drinking water for human consumption; or  
(B) contains fewer than 10,000 mg/l total dissolved solids; and
- (2) which is not an exempted aquifer."

A review of the aquifers specifically identified by the commentor indicated that some of the proposed exemptions were not existing sources of drinking water and had total dissolved solids concentrations in excess of 10,000 mg/l prior to any injection activities. Accordingly, these were not exempted because by definition they were not USDW's.

In the case of the other aquifers, existing wells are currently injecting with permits issued by the California Division of Oil and Gas. In accordance with the Memorandum of Agreement between the Division of Oil and Gas and the State Water Resources Control Board (SWRCB), the permits were issued after an opportunity for review by the appropriate regional board of the SWRCB. Accordingly all current permits were issued after the involvement of the primary state agency charged with protecting the existing and potential beneficial uses of the groundwater. EPA reviewed the proposed exemptions against the criteria outlined in 40 CFR 146.04 and approved all but two.

3. Comment: In the states application , it is unclear what circumstances permit the use of the radial flow equation as opposed to the fixed radius method of determining the area of review.

Response: In general if there is sufficient data, the radial flow equation described in 40 CFR 146.06(a) may be used to determine the area of review. If there is insufficient data, the 1/4 mile fixed radius method described in 40 CFR 146.06(b) will be used.